HT-Shaver FB Harvester

User Manual

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Freighting

Freighting on the back of a utility vehicle is preferred. The HT-Shaver is very light and if transporting on a trailer it is not heavy enough by itself to make the trailer springs work i.e. it will get badly shaken about. On rough road / tracks this could cause structural damage. One solution is to put a extra weight on the trailer as well as the harvester so the springs actually work!

HT-Shaver FB Harvester

Introduction

Congratulations on the purchase of your *Harvester Concepts Ltd HT—Shaver Harvester*. This machine is of high quality and will reward you with reduced effort and greater efficiency in your harvesting.

Learning to operate your *HT—Shaver* won't take long. You will soon find it to be an invaluable tool.

Important Safety Note

Read and understand all the instructions before using the *HT-Shaver*

- The HT– Shaver should only be used for the purposes for which it was designed. Use it for no other purpose (e.g. it is not a grader blade or battering ram!). We have manufactured the HT-Shaver using quality materials and manufacturing techniques however if faults do occur please have them corrected before you use it.
- Please read the Power Head instruction book before use. Pay particular attention to running in and safety notes.
- Please read this instruction book before use and retain it for future reference.
- It requires only one person to operate the HT-Shaver - keep all others away!
- Immediately after turning the power head off, fit the cutter bar cover. It should be removed last, before restarting the power head.

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Specifications

Cutting height above bed: 10 to 80mm

Cut width:- 1200mm

Weight, dry:- 42 Kg

Wheel track:- 990mm centre lines

Belt speed:- 19.5 m/Min

Dimensions:-

Ready to use:- width 1685mm

Length 2380mm

For Freighting:- On pallet

Approx 80 Kg

1650x1705x850mm = approx 2.4m³

Specifications subject to change without notice

rial as possible. After all filing is complete, remove burrs from the edge of the blade with a slip stone.

- Apply dry lubricant / oil to all sliding areas
- The safety and handle bars can be removed for storage or freighting.
- Check chain tension / adjust.

To clear contamination from around conveyor rollers you need to:-

- Slacken the drive chain tension. Slacken the conveyor belt. This is done at the 2 adjusters at the top end of the conveyor. Note their original setting so you can adjust back to this later. Slacken belt tensioners and remove belt (remove safety bar, right hand wheel assembly, RH conveyor fence and slide belt off RH side).

- Clean conveyor belt and rollers. Reassembly is the reverse procedure.

Preventative Maintenance

You will become reliant on the harvester to do its job and if a breakdown was to occur you could find yourself in an awkward predicament. We recommend regular maintenance to help avoid breakdowns.

As well as the maintenance on the previous page we recommend:-

- At least annually stripping the reciprocating gearbox at the end of the cutter bar. Regardless of condition, replace all bearings and the 2 drive links which also hold bearings. Preload the housing with some grease but not too much or it can jam the drive.

Conveyor belt loads up / doesn't track correctly—it moves to one side. The belts can move to one side, load up or become stressed if not tensioned correctly

- uneven belt tension. Belt will always move towards the slack side—tighten it up (see above).
- Build up of material on rollers. The conveyor belt may have to be slackened or removed totally to remove any foreign material. See the maintenance section.

If you require further assistance or spare parts, please call *Harvester Concepts Ltd*

Maintenance

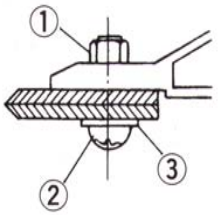
- Wash down the HT-Shaver harvester after use. Only wash enough to remove dirt. Over washing could induce corrosion. Sealed bearings are utilised but water under pressure could penetrate them.
- Check the cutter blades for looseness. If necessary adjust as follows.

  Loosen nut (1)

  Tighten screw (2) and turn back 1/2-3/4 turn

  Tighten nut (1)

  Lubricate blades, start engine and run blades for 1 minute at full speed. Stop the engine and carefully touch each nut (2) in turn. If temperature moderate, clearance is good; too hot to touch - readjust turning (2) back a little and retest.



- The cutter bar should be lubricated with a food compatible lubricant whenever refuelling and before storing. Silicon lubricants can be applied to hinge points, sliding areas etcetera. Lubricate the power head every 2 hours- use Ochiai original grease. There are 3 grease nipples: Two on the Power Head and one on the chain drive gearbox. Apply a drop of oil to the throttle cable adjacent to the carburettor
- Sharpen the cutter bar if required. Always file in the direction of the cutting edge (and lift file off blade to return to start position). Remove as little mate-

Conditions of Sale and Guarantee

Your *HARVESTER CONCEPTS LTD* product is guaranteed to be free from defects in materials and/or workmanship under normal use and service for a period of 6 months from date of initial purchase.
HARVESTER CONCEPTS LTD'S liability and obligation is limited to problems which *HARVESTER CONCEPTS LTD* acknowledges to be defective under the guarantee conditions either to

- the free replacement or repair (where practicable) at the *HARVESTER CONCEPTS LTD*
premises of any parts returned within the guarantee period

- or shipment of replacement parts to the customer, as mutually agreed to.

Supply of non standard parts or services from other than *HARVESTER CONCEPTS LTD* are not covered under the guarantee conditions unless prearranged, in writing, with *HARVESTER CONCEPTS LTD*
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Accident damage or vandalism
Modifications or unauthorised repairs to the product or its compo- nents
Where component "seconds" have been supplied
Normal wear and tear

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Your HT-Shaver Harvester Consists Of:-

- Handlebar frame (c/w 2x triknobs, 2x bolts and washers) & safety bar
- Conveyor and cutting head assembly
- Two wheel assemblies, 2 x R pins
- HT– Shaver instruction book and drive line spare parts list
- Power Head instruction book and spanners

Optional

- Bins (Recrate 47 or 75)
- Self propelled
- 24VDC powered / self propelled

Fault Finding

Engine will not start - Refer to manufacturers handbook

- Check ignition switch and safety bar switch are both on.
- Fuel in tank?
- Correct use of choke? Fouled spark plug?

Conveyor not driving correctly

- Engine revving up?
- Conveyor belt too tight. It should only be tight enough to grip on the drive roller without slipping. Before adjusting the belt tension slacken the drive chain tension. Remember that there is a belt tensioner on each side of the machine. Both tensioners must be adjusted evenly. To adjust—release lock bolt and adjust tension bolt accordingly. Retighten lock nuts and lock bolts and then adjust chain tensioner.

Start Up

1. The power head should be refuelled and started in accordance with the manufacturers handbook. **Note:** Especially during running in , vary the throttle setting - don't rev continuously .

2. With the machine adjusted ready for harvesting, remove the cutter bar cover.

3. Ensure safety bar switch and the engine stop switch are both On before attempting to start the engine. **NOTE:- If the safety bar is moved rearward it will operate the switch and stop the engine and cutter bar.**

4. The engine must be stopped and the cutter bar cover fitted before any adjustments are done. **CAUTION:** Do not approach the front of the machine with the engine running. Always switch it off and fit the cutter bar cover.

5. Let the engine warm up for a minute. Use the throttle control to rev the engine up. As the engine is revved up the conveyor and cutter bar will start.

To stop the conveyor and cutter bar, throttle the engine back with the throttle lever. Engine stop switch is on the engine. The Safety Bar switch will also stop the engine

Uses of the HT—Shaver

The HT-Shaver FB (Flat Bed) is designed for cutting close to the ground. It's ground following roller allows accurate height adjustment. There are other models for raised beds, manual or self propelled. There is also an all electric model, 24VDC, for use in tunnel houses. Uses include:-

- **Herb Harvesting**. the HT will ride on the row to be harvested, cutting the crop to a uniform height and placing the trimmings in the collection bins
- **General Trimming**. Pruning crops to a low height
- **Clean Up.** Cutting and collecting up surplus or old crops before reusing the seed beds

Assembly

- Unpack the harvester ensuring you receive all the parts and that they have not been damaged in transit.
- Layout the components on the ground in their rough position.

- The wheels may already be fitted. The wheels are usually mounted inside the frame but can also be mounted on the outside by repositioning the axle. An R pin retains the wheel on the axle

- Lift rear of conveyor and swing linkage down until it aligns with holes in main frame—see picture on page 7—fit bolt * and spacers on each side of harvester.

- Clip the safety rail into its mounts, ensuring correct way around. Retain with 2 “R” clips. Test that it operates the cut out switch correctly. If it doesn’t , adjust the switch position until it operates correctly before proceeding (see maintenance section)

- Fit the handlebars: Fit the rear bolts first then select handle bar height, align relevant holes and insert triknobs. Adjust your force on the handlebars to make screwing in the triknobs easier.

- Route the throttle cable in gentle curves and secure the throttle control on the Left Hand side of Handlebars using wing nut. Secure the cable with the Tie wrap supplied

- Fit collection bins—they slide / drop into the holders.

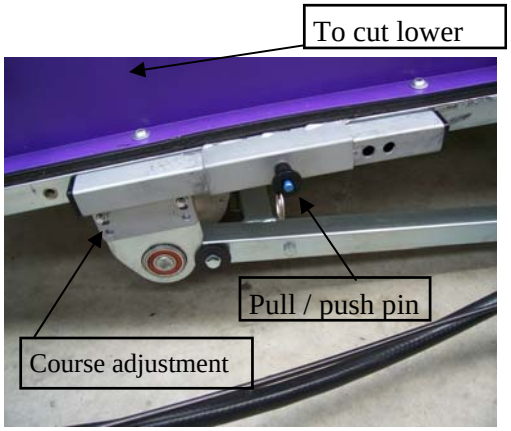
Height Adjustment

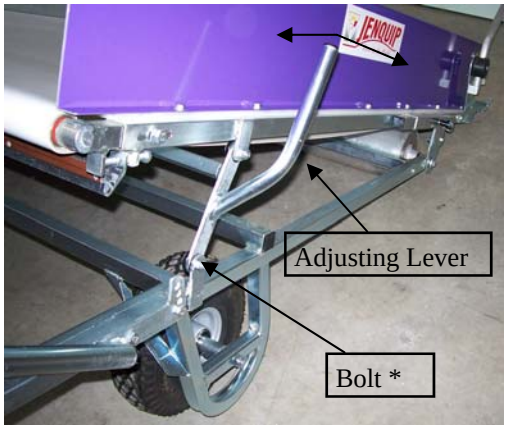
Cutter Bar Height: There is an adjuster on each side of the harvester. This is the normal fine adjustment

1. Push in the blue part and pull out the pin.

2. In relation to the bottom chassis, slide the conveyor frame forward for lower cut height and rearwards for a higher cut. (There is a lever on the right hand side of the harvester to make this easier

3.





There is also a course height adjustment. This is normally preset for a certain cutting range on initial operation and would not be adjusted in the field after that. A 10mm spanner is required for the 2 bolts on each side of the harvester. There are 4 basic height positions

Dismantling is in reverse of assembly. Take care not to damage the throttle cable. Squeeze the Tie Wrap lever into the handlebar to release the tie.

NOTE:- It is reuseable